

Solid-State Lighting Patents Submitted as a Result of DOE-Funded Projects

As of January 2007, a total of fourteen solid-state lighting patents have been granted as a result of Department of Energy-funded research projects. This demonstrates the value of DOE SSL projects to private companies and notable progress toward commercialization. Since DOE began funding SSL research projects in 2000, a total of 64 patents applications have been applied for or awarded as follows: large businesses - 27, small businesses - 21, universities - 13, and national laboratories - 3.

Organization	Title of Patent Application (Bolded titles indicate granted patents)
Agiltron, Inc.	One patent application filed.
Boston University	Formation of Textured III-Nitride Templates for the Fabrication of Efficient Optical Devices (2) Nitride LEDs Based on Flat and Wrinkled Quantum Wells Optical Devices Featuring Textured Semiconductor Layers
Cree, Inc.	Light Emitting Diode with Porous SiC Substrate and Method for Fabricating Two other patent applications filed.
Fairfield Crystal Technology	Method and Apparatus for Aluminum Nitride Monocrystal Boule Growth
GE Global Research	Light-Emitting Device with Organic Electroluminescent Material and Photoluminescent Materials Luminaire for Light Extraction from a Flat Light Source Mechanically Flexible Organic Electroluminescent Device with Directional Light Emission Organic Electroluminescent Devices and Method for Improving Energy Efficiency and Optical Stability Thereof Series Connected OLED Structure And Fabrication Method Electrodes Mitigating Effects of Defects in Organic Electronic Devices Organic Electroluminescent Devices having Improved Light Extraction Hybrid Electroluminescent Devices OLED area Illumination Source Eight other patent applications filed.
Georgia Tech Research Corporation	One patent application filed.
International Technology Exchange	One patent application filed.



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Light Prescriptions Innovators	Optical Manifold for Light-Emitting Diodes (2) Two other patent applications filed.
Maxdem Incorporated	Polymer Matrix Electroluminescent Materials and Devices
Nanosys	Nanocrystal Doped Matrices
OSRAM Opto Semiconductors, Inc.	Integrated Fuses for OLED Lighting Device Novel Method to Generate High Efficient Devices, which Emit High Quality Light for Illumination (2) OLED with Phosphors Polymer and Small Molecule Based Hybrid Light Source (2)
Pacific Northwest National Laboratory	Organic Materials with Phosphine Sulphide Moieties having Tunable Electric and Electroluminescent Properties One other patent application filed.
Philips Electronics North America	High Color-Rendering-Index LED Lighting Source using LEDs from Multiple Wavelength Bins Three other patent applications filed.
PhosphorTech Corporation	Light Emitting Device having Selenium-Based Fluorescent Phosphor Light Emitting Device having Silicate Fluorescent Phosphor Light Emitting Device having Sulfoselenide Fluorescent Phosphor Light Emitting Device having Thio-Selenide Fluorescent Phosphor
Sandia National Laboratory	Cantilever Epitaxial Process
Universal Display Corporation	Binuclear Compounds Organic Light Emitting Device Structure for Obtaining Chromaticity Stability (2) Stacked OLEDs Electrically Connected by A Reflective Electrode One other patent application filed.
University of California, San Diego	One patent application filed.
University of California, Santa Barbara	Plasmon Assisted Enhancement of Organic Optoelectronic Devices Silicone Resin Encapsulants for Light Emitting Diodes Four other patent applications filed.
University of Southern California	Fluorescent Filtered Electrophosphorescence